

CLAIMS

1. A method for producing a medical device for living soft tissue having:

a melting step of producing ferritic stainless steel by melting method,

a working step of working said ferritic stainless steel to the shape of a medical device for living soft tissue to obtain a medical device body, and

a nitrogen absorption step of bringing said medical device body into contact with a gas containing nitrogen at a predetermined treatment temperature or more to make said ferritic stainless steel forming said medical device body absorb nitrogen to transform at least part of said ferritic stainless steel to austenite.

2. The method of production of a medical device for living soft tissue as set forth in claim 1, wherein said ferritic stainless steel has as main ingredients Fe in an amount of 50 to 90 wt%, Cr and/or Mn in amounts of 10 to 30 wt%, and Mo and/or Ti in amounts of 0 to 10 wt%.

3. The method of production of a medical device for living soft tissue as set forth in claim 1, wherein said ferritic stainless steel has as main ingredients

Fe in an amount of 65 to 80 wt%, Cr and/or Mn in amounts of 15 to 25 wt%, and Mo and/or Ti in amounts of 0 to 5 wt%.

4. The method of production of a medical device for living soft tissue as set forth in any one of claims 1 to 3, wherein said treatment temperature is in a temperature range of 800 to 1500°C.

5. The method of production of a medical device for living soft tissue as set forth in any one of claims 1 to 3, wherein said treatment temperature is in the temperature range of 1100 to 1300°C.

6. The method of production of a medical device for living soft tissue as set forth in any one of claims 1 to 5, wherein said ferritic stainless steel is made to contain nitrogen in an amount of at least 0.5 wt%.

7. The method of production of a medical device for living soft tissue as set forth in any one of claims 1 to 5, wherein said ferritic stainless steel is made to contain nitrogen in an amount of at least 0.8 wt%.

8. The method of production of a medical device for living soft tissue as set forth in any one of claims 1 to 7, wherein at least part of said ferritic

stainless steel is transformed to austenite to form a two-phase structure of ferrite and austenite.

9. The method of production of a medical device for living soft tissue as set forth in any one of claims 1 to 7, wherein all of said ferritic stainless steel is transformed to austenite.

10. The medical device for living soft tissue produced by a method of production of a medical device for living soft tissue as set forth in any one of claims 1 to 9.